1646

#14 3rd mono 1/24/02 1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/530,219B

DATE: 01/11/2002
TIME: 12:13:06

Input Set : A:\Rabg4016.app
Output Set: N:\CRF3\01112002\I530219B.raw

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<110> APPLICANT: NIEHRS, CHRISTOF
GLINKA, ANDREI
<120> TITLE OF INVENTION: AN INHIBITOR PROTEIN OF THE WNT SIGNAL PATH
<130> FILE REFERENCE: RABG/40168
<140> CURRENT APPLICATION NUMBER: 09/530,219B
<141> CURRENT FILING DATE: 2000-07-27
<150> PRIOR APPLICATION NUMBER: PCT/DE98/03155
<151> PRIOR FILING DATE: 1998-10-27
<150> PRIOR APPLICATION NUMBER: DE 197 47 418.7
<151> PRIOR FILING DATE: 1997-10-27
<160> NUMBER OF SEQ ID NOS: 9
<170> SOFTWARE: PatentIn Ver. 2.1
<210> SEQ ID NO: 1
<211> LENGTH: 1297
<212> TYPE: DNA
<213> ORGANISM: Xenopus laevis
<400> SEQUENCE: 1

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cggtgcctct tattgtcttt tggggtttta tcttggatgg ggcacttggc tttgtcatga 180
tgaccaactc caactccatc aagaatgtgc cggcggcacc agcaggtcag cccattggct 240
actaccctgt gagcgtcagt ccggactccc tatatgatat tgccaacaag taccaacctc 300
tggatgccta cccgctctac agttgcacgg aagatgatga ctgtgccctt gatgaattct 360
gtcacagttc cagaaacggc aactctctgg tttgcttggc atgccggaaa cgcagaaagc 420
gttgcctgag ggacgccatg tgctgcacag gcaactactg tagcaacgga atttgtgtcc 480
ctgtggagca agatcaagag cgcttccaac accagggata cctggaagaa accattctgg 540
aaaactataa taatgctgat catgcaacaa tggatactca ttccaaatta accacgtccc 600
catctggaat gcagcccttt aaaggccgtg atggtgatgt ttgcctccga tcaactgact 660
gtgcgccagg tctatgctgt gcccgtcatt tctggtcaaa gatctgcaag ccggtccttg 720
atgaaggcca agtgtgcacc aagcacagga ggaaaggctc tcacgggcta gagattttcc 780
agcgttgtca ctgcggtgcc ggactctcgt gccggttaca gaaaggagaa tttacaactg 840
tccctaaaac atcgagactt cacacttgcc aaagacacta agcgaggcct acagagcctg 900
aaggaccttc tctaaattaa gctaattaag actttggtac ctgcatgtta ttttctcagt 960
ttacatgaag tgctctggtc ttccctgaac ccggaagctg cgcaacttgt ttctttttt 1020
gaggaacttc ctaattaatg ctaattacag taaattactg tgttgtaaat actacgcaag 1080
gagacctgta aaaactgtaa atacccgtgt atagaaagtg tacatgatct tctctattgt 1140
aacctgccac cttgtacatt ccgacgcgct cttccctttt tatatatata tatatataaa 1200
tatatattat attatgtaga gtttacgtct agtatgtctg tatttttaat tgaaataaaa 1260
catttctaaa cttaaaaaca aaaaaaaaaa aaaaaaa 1297

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<211> LENGTH: 881
<212> TYPE: DNA
<213> ORGANISM: Mus sp.
<400> SEQUENCE: 2

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aaggttcatc agcctgcatg ctctgtagga ggaaaaagaa acgatgccac agagatggga 180

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62 tgtgttgccc tggtacccgc tgcaataatg gaatctgcat cccagtcact gagagcatcc 240
63 tcaccccaca tatcccagct ctggatggca cccggcatag agatcgcaac catggtcact 300
64 attccaacca tgacctggga tggcagaatc taggaaggcc acactccaag atgcctcata 360
65 taaaaggaca tgaaggagac ccatgcctac ggtcatcaga ctgcattgat gggttttgtt 420
66 gtgctcgcca cttctggacc aaaatctgca aaccagtgct ccatcagggg gaagtctgta 480
67 ccaaacaacg caagaagggt tcgcacgggc tggagatttt ccagaggtgt gactgtgcaa 540
68 agggcctgtc ctgcaaagtg tggaaagatg ccacctactc ttccaaagcc agactccatg 600
69 tatgccagaa gatctgataa acactggaag agtcatcact agcagactgt gaatttgtgt 660
70 atttaatgca ttatggcatg atggaaacct ggattggaat gcggaagaat gagggatgtg 720
71 gtaagaatgt ggagcagaag agggcaggac tgaatcaagt agagtcgaca acaaccaaag 780
72 tactaccagt gcttccgtta tgtgcctcat ctatgtaaat aatgtacaca tttgtgaaaa 840
73 tgctattatt aaaagaaagc acaccatgga aattacaaaa a 881
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77 <211> LENGTH: 1226
78 <212> TYPE: DNA
79 <213> ORGANISM: Mus sp.
81 <400> SEQUENCE: 3
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83 gctgtccggt tcttggccgt gtttacaatg atggctctct gcagcctccc tctgctagga 120
84 gccagtgcca ccttgaactc agttctcatc aattccaacg cgatcaagaa cctgccccca 180
85 ccgctgggtg gtgctggggg gcagccgggc tctgctgtca gtgtggcgcc gggagttctc 240
86 tatgagggcg ggaacaagta ccagactctt gacaactacc agccctaccc ttgcgctgaa 300
87 gatgaggagt gcggctctga cgagtactgc tccagcccca gccgcggggc agccggcgtc 360
88 ggaggtgtac agatctgtct ggcttgccga aagcgcagga agcgctgcat gacgcacgct 420
89 atgtgctgcc ccgggaacta ctgcaaaaat ggaatatgca tgccctctga ccacagccat 480
90 tttcctcgag gggaaattga ggaaagcatc attgaaaacc ttggtaatga ccacaacgcc 540
91 gccgcggggg atggatatcc cagaagaacc acactgactt caaaaatata tcacaccaaa 600
92 ggacaagaag gctccgtctg cctccgatca tcagactgtg ccgcagggct gtgttgtgca 660
93 agacacttct ggtccaagat ctgtaaacct gtccttaaag aaggtcaggt gtgcaccaag 720
94 cacaaacgga aaggctccca cgggctggag atattccagc gctgttactg cggggaaggc 780
95 ctggcttgca ggatacagaa agatcaccat caagccagca attcttctag gctccacacc 840
96 tgccagagac actaaaccga cagtctaaat atgatggact ctttttatct aatatatgct 900
97 acgaaaatcc tttatgattt gtcagctcaa tcccaaggat gtaggaatct tcagtgtgta 960
98 attaagcatt ccgacaatac tttccaaaag ctctggagtg taaggacttt gtttcttgat 1020
99 ggaactcccc tgtgattgca gtaaattact gtgttgtaaa tcctcagtgt ggcacttacc 1080
100 tgtaaatgca gcaaaacttt taattatttt tctagaggtg tggtacattg ccttgtttct 1140
101 cttgcatgta aatttttttt gtacacggtt gattgtcttg actcataaat attctatatt 1200
102 ggagtagaaa aaaaaaaaaa aaaaaa 1226
105 <210> SEQ ID NO: 4
106 <211> LENGTH: 768
107 <212> TYPE: DNA
108 <213> ORGANISM: Homo sapiens
110 <400> SEQUENCE: 4
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112 ggtattgcca cagtccccac caaggatcat cggcctgcat ggtgtgtcgg agaaaaaaga 120
113 agcgctgcca ccgagatggc atgtgctgcc ccagtacccg ctgcaataat ggcatctgta 180
114 tcccagttac tgaaagcatc ttaacccctc acatcccggc tctggatggt actcggcaca 240
115 gagatcgaaa ccacggtcat tactcaaacc atgacttggg atggcagaat ctaggaagac 300
116 cacacactaa gatgtcacat ataaaagggc atgaaggaga cccctgccta cgatcatcag 360

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117 actgcattga agggttttgc tgtgctcgtc atttctggac caaaatctgc aaaccagtgc 420
118 tccatcaggg ggaagtctgt accaaacaac gcaagaaggg ttctcatggg ctggaaattt 480
119 tccagcgttg cgactgtgcg aagggcctgt cttgcaaagt atggaaagat gccacctact 540
120 cctccaaagc cagactccat gtgtgtcaga aaatttgatc accattgagg aacatcatca 600
121 attgcagact gtgaagttgt gtatttaatg cattatagca tggtggaaaa taaggttcag 660
122 atgcagaaga atggctaaaa taagaaacgt gataagaata tagatgatca caaaaaaaaa 720
123 aaaaaaaaag atgcggccgc aagcttattc cctttagtga gggttaat 768
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127 <211> LENGTH: 828
128 <212> TYPE: DNA
129 <213> ORGANISM: Homo sapiens
131 <400> SEQUENCE: 5
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133 gaaagggtcc tatctggaga cgagggagta caacgtgctg aatgtgtgcg gttcagggag 120
134 catttggtaa ccctgcattt gggagcagtg ggcactaacc ggttttggag aggtggacac 180
135 ataaggactg tgatcagcgc ccgggtccaa gagggcgggt acctggacct ctgggtgcct 240
136 caccctctcc ccgaaccctt cccacagccg tacccgtgcg cagaggacga ggagtgcggc 300
137 actgatgagt actgcgctag tcccaccccg cggaggggac cgccggccgt gcaaatctgt 360
138 ctcgcctgca ggaagcgccg aaaacgctgc atgcgtcacg ctatgtgctg ccccgggaat 420
139 tactgcaaaa atggaatatg tgtgtcttct gatcaaaatc atttccgagg agaaattgag 480
140 gaaaccatca ctgaaagctt tggtaatgat catagcacct tggatgggta ttccagaaga 540
141 accaccttgt cttcaaaaat gtatcacacc aaaggacaag aaggttctgt ttgtctccgg 600
142 tcatcagact gtgcctcagg attgtgttgt gctagacact tctggtccaa gatctgtaaa 660
143 cctgtcctga aagaaggtca agtgtgtacc aagcatagga gaaaaggctc tcatggacta 720
144 gaaatattcc agcgttgtta ctgtggagaa ggtctgtctt gccggataca gaaagatcac 780
145 catcaagcca gtaattcttc taggcttcac acttgtcaga gacactaa 828
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149 <211> LENGTH: 432
150 <212> TYPE: DNA
151 <213> ORGANISM: Homo sapiens
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156 ggcggcggtc cccacggccc ccgcgcccgc tccgacggcg acctcggctc cagtcaagcc 180
157 cggcccggct ctcagctacc cgcaggagga ggccaccctc aatgagatgt tccgcgaggt 240
158 tgaggaactg atggaggaca cgcagcacaa attgcgcagc gcggtggaag agatggaggc 300
159 agaagaagct gctgctaaag catcatcaga agtgaacctg gcaaacttac ctcccagcta 360
160 tcacaatgag accaacacag acacgaaggt tggaaataat accatccatg tgcaccgaga 420
161 aattcacaag tt 432
164 <210> SEQ ID NO: 7
165 <211> LENGTH: 1383
166 <212> TYPE: DNA
167 <213> ORGANISM: Gallus sp.
169 <400> SEQUENCE: 7
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171 cgcggcggcg atggctgctg ctgttggccg tgctggcggc tctgtgctgc gccgcggccg 120
172 ggagcggcgg gcggcggcga gcggccagcc tgggcgagat gctgcgggag gtggaggcgc 180
173 tgatggagga cacgcagcac aagctgcgca acgccgtgca ggagatggaa gctgaagaag 240
174 aaggggcaaa aaaactgtca gaagtaaact ttgaaaactt acctcccacc taccataatg 300

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175 agtccaacac agaaaccaga attggtaata aaactgttca gactcatcaa gaaattgata 360
176 aggttacaga taacagaact ggatcaacaa ttttttccga gacaattatt acatctataa 420
177 agggtggaga aaacaaaaga aatcatgagt gtatcattga tgaagactgt gaaacaggaa 480
178 agtattgcca gttctccacc tttgaataca agtgtcagcc ctgtaaaacc cagcatacac 540
179 actgctcacg agatgttgaa tgctgcggag accagctttg tgtttggggt gagtgcagga 600
180 aagccacttc aagaggagaa aatggtacca tttgtgagaa ccaacatgac tgcaacccag 660
181 gaacgtgctg tgcttttcag aaagaactgc tgtttcctgt gtgcactccg ttacccgaag 720
182 aaggtgaacc ttgccatgat ccttcaaaca gacttctcaa cctgatcacc tgggaactgg 780
183 aacctgatgg agtactagag cgctgcccat gtgcaagtgg cttgatctgc caacctcaga 840
184 gcagccacag tactacatct gtgtgtgaac tgtcctccaa tgaaaccagg aaaaacgaaa 900
185 aagaagatcc cttgaacatg gatgagatgc catttatcag tttaataccc agagatattc 960
186 tttctgatta cgaagaaagc agcgtcattc aggaagtgcg taaagaatta gaaagcctgg 1020
187 aggaccaagc aggtgtgaag tctgagcatg acccggctca tgacctattt ctgggagatg 1080
188 aaatatgaag ttcaaacacc agtttagtta gtcctagaaa ttgttgtcta gtgtcttgct 1140
189 tacatacacc cttaacagat actgctggat agaagtgcaa taaacatctt cattgagcat 1200
190 ccgttttcgt gcaccaaacc tgcatgttca aattcatgtt gaattcactc aatctttgga 1260
191 ccaaactttc catcaaagac aaatgagaaa ggcatcagtg tttcctttgg attaatcctt 1320
192 tcctttgtac agcagaaata aacgtatcag tactcgtact cattaaaaaa acacacggag 1380
193 cat 1383

196 <210> SEQ ID NO: 8
197 <211> LENGTH: 44
198 <212> TYPE: PRT
199 <213> ORGANISM: Artificial Sequence
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202 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus wnt
203 Protein
205 <220> FEATURE:
206 <221> NAME/KEY: MOD_RES
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208 <223> OTHER INFORMATION: Any Amino Acid
210 <220> FEATURE:
211 <221> NAME/KEY: VARIANT
212 <222> LOCATION: (9)
213 <223> OTHER INFORMATION: Ay amino acid
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217 <222> LOCATION: (10)..(16)
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222 <222> LOCATION: (18)..(19)
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227 <222> LOCATION: (21)..(26)
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231 <221> NAME/KEY: MOD_RES
232 <222> LOCATION: (28)..(32)

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242 <222> LOCATION: (40)..(41)
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246 <221> NAME/KEY: MOD_RES
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248 <223> OTHER INFORMATION: Any Amino Acid
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252   1               5                  10                  15
W--> 254 Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa
255             20                  25                  30
W--> 257 Cys Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Gly Xaa Cys
258           35                  40
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262 <211> LENGTH: 65
263 <212> TYPE: PRT
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus wnt
268       Protein
270 <220> FEATURE:
271 <221> NAME/KEY: MOD_RES
272 <222> LOCATION: (2)..(3)
273 <223> OTHER INFORMATION: Any Amino Acid
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277 <222> LOCATION: (5)..(6)
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282 <222> LOCATION: (8)..(11)
283 <223> OTHER INFORMATION: Any Amino Acid
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286 <221> NAME/KEY: MOD_RES
287 <222> LOCATION: (14)..(15)
288 <223> OTHER INFORMATION: Any Amino Acid
290 <220> FEATURE:
291 <221> NAME/KEY: MOD_RES
292 <222> LOCATION: (17)
293 <223> OTHER INFORMATION: Any Amino Acid
295 <220> FEATURE:
296 <221> NAME/KEY: MOD_RES
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Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
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L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9